From Folklore to Environmental Science: Some Stamps of New Caledonia¹

Garry Toth and Don Hillger

ABSTRACT: This article features various weather-related postage stamps of New Caledonia to illustrate the age of satellites and environmental science, and how some traditional weather lore is being maintained within it. Some of the stamp designs suggest that both tropical cyclones, and climatic variability through the effects of *El Niño*, may contribute to this blend of the traditional and the modern.

KEYWORDS: Folklore; Weather Lore; New Caledonia; Weather; Climate; Environmental Science; Satellites; Tropical Cyclones; *El Niño*; Stamp Collecting

Introduction

New Caledonia, in the southwestern Pacific at approximately 22° south latitude, has tropical weather with dry and wet seasons, but is also influenced by two climatic extremes: tropical cyclones (occurring generally in the November to mid-May period) and the large-scale oceanic cycle known as ENSO (the *El Niño* Southern Oscillation).

The weather and climate experienced by a people could be a source of some of its folklore (traditional beliefs, customs, stories and myths expressed in various ways). For example, in some southeast Asian countries, the return of the monsoon is celebrated with festivals symbolizing rebirth and hope for a good growing season to come. In New Caledonia, the Festival of the Yam celebrates the yam harvest. It usually takes place in mid-March, near the end of the hot and rainy crop-growing season, with the dry season looming.

The tropical cyclones of New Caledonia (known as typhoons in the northwestern Pacific and as hurricanes in the Atlantic and northeastern Pacific) can have significant impacts, and so must leave some traces in the

Garry Toth, MSc, now retired, is a meteorologist who worked many years with the Meteorological Service of Canada. Send correspondence to gmt.varia@gmail.com. Don Hillger, PhD, is a research meteorologist with the National Oceanic and Atmospheric Administration (NOAA) and holds a cooperative position at Colorado State University. Send correspondence to don.hillger@colostate.edu. The authors specialize in the subjects of weather, climate, and un-manned satellites on stamps and covers, and have written extensively about them. A complete publication list with electronic reproductions is available at http://rammb.cira.colostate.edu/dev/hillger/stamp-articles.htm.



Figure 1. Symbolic New Caledonian god blowing a gale, 1962 (Scott 322).

people and culture and therefore contribute in some way to the folklore of the region. This may also be true of other types of strong storms or unusual climatic events such as *El Niño* and *La Niña*. This article presents postage stamps from New Caledonia with themes related to meteorology, climate and the environment, and shows how some of them can also be linked to folklore. The stamps are identified by their *Scott* catalogue numbers and years of issue.

*

Tropical Cyclones and Other Storms

Scott 322 (1962, Fig. 1) was issued for the 3rd Session meeting of the WMO (World Meteorological Organization) Region 5 in Nouméa in 1962. It features a barograph at the upper right and a symbolic god blowing a gale onto New Caledonia. The four black curves with arrows can be interpreted as the tracks of major cyclones that struck the area (a maxicard with the same design, not shown here, adds the years 1932, 1944, 1948 and 1951 to those lines). Memories of those storms may have entered local lore, and the wind god in this stamp could therefore be thought of as symbolizing a folkloric element related to cyclones in New Caledonia.



Figure 2. 25th World Meteorological Day, and a cyclone near New Caledonia, 1985 (Scott 523).



Figure 3. A Nimbus polar-orbiting weather satellite, 1965 (Scott C39).

The cyclone theme continues with Scott 523 (1985, Fig. 2). It was issued for the 25th World Meteorological Day (March 23 of each year) and depicts communications between New Caledonia Meteorological Centre in Nouméa and an airplane and a ship. It also includes a cyclone with its spiral arms indicating clockwise rotation (correct for the southern hemisphere) just west of New Caledonia.

Scott C39 (1965, Fig. 3), issued for the 5th Meteorological World Day, introduces a Nimbus polar-orbiting weather satellite above dark rain clouds and an agitated sea around New Caledonia. Weather satellites were developed in the 1960s and filled in some of the gaps in meteorological observations, particularly over the oceans. In the pre-satellite era, cyclones that remained over the oceans could come and go without ever being detected.

Another wind god blowing a storm from 'on high' appears in *Scott* C101 (1973, Fig. 4). No cyclone is present. Instead, the bold design strongly contrasts the hot energetic sun with the cool, dark and threatening rain clouds. The god could be interpreted as a type of folkloric illustration of the tension between the two, just as, more prosaically, a meteorological front is the narrow and often active zone of transition between cold and warm airmasses. That contrast can lead to the formation of severe storms, of which the wind god is the metaphorical source. The stamp also

celebrates both the centenary of the WMO and the 13th World Meteorological Day, and depicts a meteorological satellite (whose design matches no known satellite, however).



Figure 4. Hot-cold contrast and wind god blowing a storm, 1973 (Scott C101).

*

Improved Monitoring of Earth by Satellite

The First GARP (Global Atmospheric Research Project) Global Experiment (FGGE) was a period of intensive meteorological observations made in 1978 and 1979 by traditional platforms as well as satellites. *Scott* C150 (1979, Fig. 5) commemorates both FGGE and the WMO. It depicts a set of five operational weather satellites in geostationary orbits at regular intervals above the equator. That configuration was designed to provide continuous monitoring of weather systems around the world at low and middle latitudes. The data from those satellites were used by national meteorological services in their forecast programs.

Satellites with special environmental-observing missions were also developed. One example is the TOPEX-Poseidon satellite, launched in 1992 to observe ocean height topography, from which ocean temperatures can be inferred. The ocean is not perfectly flat; it has various 'hills' and



Figure 5. Commemorating both FGGE and the WMO, 1979 (Scott C150).



Figure 6. TOPEX-Poseidon satellite and some maps made from its data, 1994 (Scott C268).

'dales' related to ocean currents and temperatures. Scott C268 (1994, Fig. 6) shows the satellite and some maps made from its data. The largest map at the bottom of the stamp (it can be rotated 130° to the left to see it in its usual orientation with south toward the bottom) shows a typical El Niño pattern of abnormally warm water in red and yellow tones in a line stretching across the central Pacific. In an El Niño event, the southwestern Pacific (including New Caledonia) is much drier than normal, even to the point of drought, while heavy precipitation and flooding occur in the northern part of the west coast of South America. El Niño is a cyclical but irregular phenomenon; many New Caledonians probably have memories and stories of its past effects that have become part of the folklore of the region. The stamp also commemorates the 50th anniversary of ORSTOM, a French overseas scientific and technical organization.



Figure 7. Drought versus normal conditions in New Caledonia, 1983 (Scott 492).

Environment and Climate

Scott 492 (1983, Fig. 7), with the theme of water as a vital resource, is also reminiscent of ENSO, since it drought conditions contrasts (possibly in an *El Niño* period) with normal conditions that require sufficient rainfall as symbolized by the water drop. In the *La Niña* phase of ENSO, which is not referred to in the stamp, the southwestern Pacific region tends to be wetter than usual during its rainy season.

The protection of nature, and solar energy as the source of life, are the themes of the colourful Scott 459 (1980, Fig. 8). Because of the solar collector at the right, one can also attribute to this stamp an implied theme of solar energy as environmentally-friendly energy source. Economic solar panel technology for large-scale applications was not available in 1980, but in recent years great strides toward that goal have been made.



Figure 8. The protection of nature, and solar energy as the source of life, 1980 (Scott 459).

Scientific research has clarified the role of the oceans in Earth's climate, and the effects that global warming is having on them. This is particularly important for island nations, and *Scott* 1000 (2006, Fig. 9) reflects that fact by commemorating the conference of the Regional Ocean Environment Program (French acronym PROE). Of the 26 Program members, 21 are island countries or territories in the Pacific. The PROE has a broad range of goals, including the study of the effects of global warming and climate change on the oceans and the resulting impacts on the PROE members.

High on the list of potential impacts is of course sea-level rise, to which some members of the PROE are very vulnerable. The image in *Scott* 987 (2006, Fig. 10) symbolizes that vulnerability. The islet Nokanhoui is shown as a tiny partly-treed sandbar barely above sea level. There is no mention of sea-level rise in the stamp, but anyone examining it could easily wonder how many low islands like this one in the southwestern Pacific will be submerged as waters rise in the coming decades.

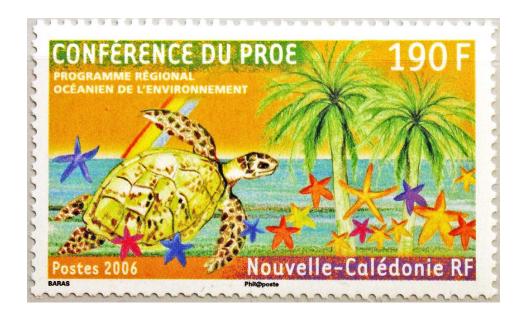


Figure 9. Commemorating the conference of the Regional Ocean Environment Program, 2006 (Scott 1000).



Figure 10. The islet Nokanhoui, 2006 (Scott 987).

Conclusion

This article has presented ten postage stamps of New Caledonia that have themes pertaining to weather, climate and environmental science, and has briefly discussed how some of their designs may also be related to the folklore of the region.

* *

Reference

Houseman, Donna, and Chad Snee, *Scott 2017 Standard Postage Stamp Catalogue*, 6 vols ([Sidney, OH]: Amos Media Company, 2016).

* *

2018 American Folklore Society Annual Meeting 17/10/2017 to 20/10/2017

Where: Buffalo Niagara Country Convention Center, Buffalo, NY, USA Theme: on which presentations are encouraged but not required—is:

"No Illusions, No Exclusions.".

See the 2018 AFS Annual Meeting page for complete, current information.

Prospective participants submit proposals for presentations; proposal submission begins in **February** and ends **March 31**. Proposals will be reviewed by a committee of members and/or folklorists from the region. Typically, AFS sends notification of acceptance or rejection for the meeting program, and posts hotel and tour information in the first weeks of **June**, then posts a preliminary program schedule for the meeting in early **July**.

Preregistration (at lower rates) closes on **August 31**; on-site registration is available at a higher rate.

Contact: Lorraine Walsh Cashman

<u>lcashman@indiana.edu</u>